## ACRONYMS AND ABBREVIATIONS

**%RSD** Percent relative standard deviation

A ACDEH Alameda County Department of Environmental Health

**ACHCS** Alameda County Health Care Services

ACL Ambient concentration limit
ACOE Army Corps of Engineers

ALARA As low as reasonably achievable

AMS Accelerator mass spectrometry

**ANSI** American National Standards Institute

**ARO** Assurance Review Office at LLNL

**AST** Aboveground Storage Tank

**ATSDR** Agency for Toxic Substances and Disease Registry

**AVLIS** Advanced Laser Isotope Separation

**AWQC** Ambient water quality criteria

**B** BAAQMD Bay Area Air Quality Management District

**BA/BO** Biological Assessment/Biological Opinion

**BCG** Biota concentration guide

**BETX (or BTEX)** Benzene, ethyl benzene, toluene, and xylene

BMP Best management practice

BOD Biochemical oxygen demand

**Bq** Becquerel

 $\mathbf{C}$ 

BSA Blanket Service Agreement
CAM Continuous air monitor

**CAMP** Corrective Action Monitoring Program

**CAREs** (Tri-Valley) Communities Against a Radioactive Environment

**CCR** California Code of Regulations

**CDFG** California Department of Fish and Game

**CDHS** California Department of Health Services

**CDHS-RHB** California Department of Human Services, Radiological Health Branch

**CEI** Compliance Evaluation Inspection

**CEPRC** Chemical Emergency Planning and Response Commission

**CEQA** California Environmental Quality Act of 1970

**CERCLA** Comprehensive Environmental Response, Compensation and Liability Act of 1980

CERCLA/SARA Superfund Amendments and Reauthorization Act (SARA)

CES Chemistry and Materials Science Environmental Services

**CFC** Chlorofluorocarbon

**CFR** Code of Federal Regulations

**CHA** Critical habitat area

**CHP** California Highway Patrol

**Ci** Curie

**COC** Constituent of concern

**CRD** Catalytic reductive dehalogenation

**CRMP** Cultural Resource Management Plan

**CRWQCB** California Regional Water Quality Control Board

**CVRWQCB** Central Valley Regional Water Quality Control Board

**CWG** Community Work Group

**D** DAP Discipline Action Plan

**DC** Direct current

DCG Derived Concentration GuideDHS Department of Health Services

**DL** Detection limits

DLM Designated level methodology
 DMP Detection Monitoring Program
 DOE U.S. Department of Energy

**DOE/OAK** DOE Oakland Operations Office

**DOT** U.S. Department of Transportation

**DRB** Drainage Retention Basin

**DTSC** (California Environmental Protection Agency), Department of Toxic Substances

Control

**DWTF** Decontamination and Waste Treatment Facility

**E** Energy efficiency

EA Environmental Assessment

EDE Effective dose equivalent

EDO Environmental Duty Officer

EIR Environmental impact report

**EIS** Environmental impact statement

**EML** Environmental Monitoring Laboratory

**EMRL** Environmental Monitoring Radiation Laboratory

**EO** Electroosmosis

**EOG** Environmental Operations Group

**EPA** U.S. Environmental Protection Agency

**EPCRA** Emergency Planning and Community Right-to-Know Act of 1986

**EPD** Environmental Protection Department (LLNL)

**EPL** Effluent pollutant limit

**EPTP** Environmental Protection Training Department (LLNL)

**ERD** Environmental Restoration Division (of the Environmental Protection Department

at LLNL)

ES&H Environment, Safety, and Health
EST Environmental support team

EWSF Explosives Waste Storage Facility
EWTF Explosives Waste Treatment Facility

**F** Fission Energy and Systems Safety Program

**FFA** Federal facility agreement

**FHC** Fuel hydrocarbon

**FONSI** Finding of no significant impact

Freon 11 Trichlorofluoromethane

**Freon 113** 1,1,2-trichloro-1,2,2-trifluoroethane

**FSP** Facility safety plan

**G** g Gram

**GAC** Granulated activated carbon **GBq** Gigabecquerel. (10<sup>9</sup> Bq)

**GIS** Geographic Information Systems

**GSA** General Services Area (LLNL Site 300)

GTU GAC treatment unit
GWP Ground Water Project

**GWPMP** Ground Water Project Management Program

**GWTF** Ground Water Treatment Facility **GWTS** Ground Water Treatment System

**Gy** Gray

**H** HCAL Hazards Control Department's Analytical Laboratory

**HCD** Hazards Control Department (LLNL)

**HCRML** Hazards Control Radiological Measurements Laboratory

**HE** High explosives

**HEPA** High-efficiency particulate air (filter)

**HMX** Cyclotetramethyltetramine. Also referred to as octahydro-1,3,5,7-tetranitro-

1,3,5,7-tetrazocine.

**HPGe** High-purity germanium

**HPLC** High Pressure Liquid Chromatography

**HSU** Hydrostratigraphic unit

**HT** Tritiated hydrogen gas (See also tritium in Glossary.)

**HTO** Tritiated water and water vapor (See also tritium in Glossary.)

**HWCA** (California) Hazardous Waste Control Act

**HWM** Hazardous Waste Management Division (of the Environmental Protection

Department at LLNL)

I ICRP International Commission on Radiological Protection

**IMS** Instrumented membrane system

**IQR** Interquartile range

**ISMS** Integrated Safety Management System

IWS Integration work sheetJON Judgement of Need

K kg Kilogram

J

**kCi** Kilocurie (10<sup>3</sup> Ci)

**kBq** Kilobequerel (10<sup>3</sup> Bq)

L LBNL Lawrence Berkeley National Laboratory

**LEPC** Local Emergency Planning Committee

**LLNL** Lawrence Livermore National Laboratory

**LOEC** Lowest observed effect concentration

**LOS** Limit of sensitivity

**LUFT** Leaking underground fuel tank

**LWRP** Livermore Water Reclamation Plant

M MAPEP Mixed Analyte Performance Evaluation Program

**mCi** Millicurie (10<sup>-3</sup> Ci)

MCL Maximum contaminant level

MDC Minimum detectable concentration

**MDL** Minimum detection limit

MEI Maximally exposed individual

MEKMethyl ethyl ketonemGyMilligray  $(10^{-3} \text{ Gy})$ MLMegaliter  $(10^6 \text{ liters})$ 

**mL** Milliliter  $(10^{-3} \text{ liter} = 1 \text{ cm}^3)$ 

MPNMost probable numbermRMilliroentgen  $(10^{-3} \text{ R})$ mremMillirem  $(10^{-3} \text{ rem})$ 

**MRF** Materials Recovery Facility

**MRP** Monitoring and Reporting Program

MSDS Material safety data sheet mSv Millisievert  $(10^{-3} Sv)$ 

MTBE Methyl tertiary-butyl etherMTU Minature treatment unit

N NCRP National Council on Radiation Protection

**NEPA** National Environmental Policy Act

**NESHAPs** National Emission Standards for Hazardous Air Pollutants

**NHPA** National Historical Preservation Act

**NIF** National Ignition Facility

NIST National Institute for Standards and Technology

**NOEC** No observed effect concentration

NOI Notice of Intent
NOV Notice of Violation

**NPDES** National Pollutant Discharge Elimination System

**NPL** National Priorities List

NRC Nuclear Regulatory Commission

**nSv** Nanosievert (10<sup>-9</sup> Sv)

**O** OBT Organically bound tritium

**ORAD** Operations and Regulatory Affairs Division (of the Environmental Protection

Department at LLNL)

**OSP** Operational safety plan

**OU** Operable unit

P P2 Pollution Prevention

PA Programatic agreement
PCB Polychlorinated biphenyl

**PCE** Perchloroethylene (or perchloroethene). Also called tetrachloroethylene (or

tetrachloroethene).

pCiPicocurie  $(10^{-12} \text{ Ci})$ pgPicogram  $(10^{-12} \text{ g})$ 

**PHA** Public Health Assessment

pHMS pH Monitoring StationPM Performance measure

**PMCL** Primary maximum contaminant level

**POTW** Publicly owned treatment works

ppb Parts per billionppm Parts per million

**ppmv** Parts per million by volume

**PPOA** Pollution Prevention Opportunity Assessment

**PTU** Portable treatment unit

**Q QA** Quality assurance

**QAP** Quality Assurance Plan

**QC** Quality control

R R Roentgen

**RAIP** Remedial Action Implementation Plan

**RCRA** Resource Conservation and Recovery Act of 1976

**RDX** Hexahydro-1,3,5-trinitro-1,3,5-triazine

**RHB** Radiological Health Branch

**RL** Reporting limit

**RML** Radiological Measurements Laboratory

**ROD** Record of Decision

**ROI** Return on investment

**RPM** Remedial Project Manager

**RWQCB** Regional Water Quality Control Board

**S** SAA Streambed Alteration Agreement

**SAER** Site Annual Environmental Report

Sandia/California Sandia National Laboratories, California

**SAR** Safety analysis report

**SARA** Superfund Amendment and Reauthorization Act of 1986 (see also CERCLA/

SARA)

**scm** Square cubic meter

**SDF** Sewer Diversion Facility

**SE** Standard error

**SERC** State Emergency Response Commission

**SFBRWQCB** San Francisco Bay Regional Water Quality Control Board

**SHPO** (California) State Historic Preservation Office

SI Système International d'Unités

**Site 300** LLNL's Experimental Test Site, located approximately 24 km east of the Livermore

site

**SJCHD** San Joaquin County Health District

**SJVUAPCD** San Joaquin Valley Unified Air Pollution Control District

**SL** Statistical limit

**SME** Subject matter expert

**SMS** Sewer Monitoring Station

**SOP** Standard operating procedures

**SOV** Summary of violations

**SPCC** Spill Prevention Control and Countermeasure

**STAR** Sample tracking and receiving (computer system)

STP Site Treatment Plan
STU Solar treatment unit

**Sv** Sievert

**SVE** Soil vapor extraction

SWDC Semivolatile organic compound
SWDC Surface water drainage course

**SW-MEI** Sitewide maximally exposed individual member of the public

**SWPPP** Storm Water Pollution Prevention Plan

**SWRCB** (California) State Water Resources Control Board

 $\mathbf{T}$   $\mathbf{TBq}$  Terabecquerel (10<sup>12</sup> Bq)

**TCE** Trichloroethene (or trichloroethylene)

**TCLP** Toxicity characteristic leaching procedure

**TDS** Total dissolved solids

**TLD** Thermoluminescent dosimeter

**TNT** Trinitrotoluene

TOC Total organic carbon

TOX Total organic halides

**TRI** Toxic Reporting Inventory

**TRU** Transuranic waste

**TSCA** Toxic Substances Control Act

TSS Total suspended solids
TTO Total toxic organics

**TWMS** Total Waste Management System

U UC University of California

**UST** Underground storage tank

V VOC Volatile organic compound

**VTF** Vapor treatment facility

**W** WAA Waste accumulation area

**WDR** Waste Discharge Requirements

WSS Work Smart Standards

**Zone** 7 Alameda County Flood Control and Conservation District, Zone 7